U.S. Patent Application No. 10/730,289

Docket No.: 500202301-2 (1509 139) FINE GENTER

SEP 2 7 2006

## <u>REMARKS</u>

Claims 27 and 37 have been amended to overcome the objections to them. The amendments are in conformance with the Examiner's correct understanding of these claims, as set forth on page 2 of the Office Action.

Claims 21, 22 and 31-34 and 36 are canceled. Claims 21 and 30 are combined as amended claim 30, claims 21, 22 and 23 are combined as amended claim 23, claims 21, 22 and 25 are combined as amended claim 25, claims 21, 22 and 26 are combined as amended claim 26, claims 21 and 27 are combined as amended claim 27 and claims 35 and 36 are combined as amended claim 35.

Entry of the amendment is in order because it satisfies the objections to the claims and otherwise combines claims that have been previously considered. Consequently, there are no new issues and no new search is required.

The indication of claim 30 containing allowable subject matter is noted. As set forth above, claims 21 and 30 have been combined so that claim 30 is now allowed, for the reasons set forth on page 6 of the Office Action.

The sentence at the bottom of page 2 of the Office Action states: "Claims 21 -\*\*\* are rejected under 35 USC 102(b) as being anticipated by Hailey (US Patent 6252161)." Applicant presumes this rejection was intended to indicate that claims 21, 22, 27 and 35 are rejected under 35 USC 102(b). Applicant will proceed on this basis.

Applicant traverses the rejection of claim 27. The rejections of claims 21, 22 and 35 are most because of the claims being canceled or combined with other claims. The Office Action alleges Hailey discloses that the mass is carried by a non-electrically

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conductive material carrying an electric conductor, and refers to col. 4, lines 28-37, for this proposition. However, there is no disclosure in col. 4, lines 28-37, of the mass being carried by a non-electrically conductive material carrying an electric conductor. Col. 4, lines 28-37, refer to the wave guide art and do not refer to the structure of the Hailey patent. Hence, there is no indication in col. 4, lines 28-37 that the remaining structure of the Hailey patent, particularly the apertures, are included in the plastic impregnated carbon fibers mentioned in col. 4, lines 28-37. Consequently, the rejection of claim 27 as being anticipated by Hailey is incorrect.

Applicant traverses the rejection of claims 23 and 36 as being obvious as a result of Hailey. The Office Action admits Hailey does not disclose the requirement of claim 23 and former claim 36 (now combined with claim 35 as claim 35) for the longest dimension of cross sections of the passages between the opposite surfaces of the shield mass to be no more than 10% of the wavelength of the highest frequency in the range. The Examiner relies on a statement by Hailey that the diameter of the holes has a certain relationship to the frequencies. Of course, the length of the passages, as defined by claims 23 and former claim 36, and the hole diameters are not the same thing and are unrelated. Applicant notes that Hailey employs a cut and try method of determining the hole diameter, but gives no consideration to the length of the passages. Consequently, it is not obvious from Hailey that the longest dimensions of cross sections of passages between the opposite surfaces of the shield mass is no more than 10% of the wavelength of the highest frequency in the range.

Applicant traverses the rejection of claims 25 and 38 as being obvious as a result of Hailey. The Office Action alleges that Hailey discloses wall passages including

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grounded conductive tubes in the form of elements 24 and 26. However, elements 24 and 26 are not tubes. Instead they are apertures, as set forth in col. 5, lines 55 and 56.

The Office Action alleges that claims 26, 28 and 39 are obvious as a result of Hailey in view of Daoud, US Patent 6,781,851. To support this rejection, the Office Action states that Daoud discloses passage walls including electrically conductive painted surfaces, referring to col. 2, lines 61-65. In fact, Daoud is not concerned with a structure that is similar to the Hailey structure. The Daoud structure refers to a perforated cover of conforming element 116. The cover is formed and molded of non-conductive material having an electrically conductive coating, such as metalized plastic. There is no indication that the walls of the passages are painted.

The combination of references is also incorrect because painting the passages is completely contrary to the Hailey alleged improvement. In Hailey, the essential aspect of the disclosure is the dielectric-conductor, particularly conductor-impregnated plastic such as carbon-impregnated plastic. In this regard, note the alleged advantages set forth in col. 2, lines 39-42 and col. 4, lines 58-col. 5, line 48 and the sentence bridging cols. 5 and 6. Because the focus of the Hailey disclosure is on a dielectric-conductor, one of ordinary skill in the art would not have modified Hailey so that the aperture walls are painted.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance are respectfully requested and deemed in order.

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To the extent necessary, a petition for an extension of time under \$7.0.F.R. 1.136 is hereby made. Please charge any shortage in the due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025 and please credit any excess fees to such deposit account.

Respectfully submitted,

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